

20020720.qrp v02_n622.qrl.20020720

Date: Sat, 20 Jul 2002 19:03:09 EDT
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 2622

QRP-L Digest 2622

Topics covered in this issue include:

- 1) [130211] Wanted: TS520 or TS520s
by Wayne Scace <WM-Scace@wiu.edu>
- 2) [130212] Re: Offence under US code ...
by na5n@zianet.com
- 3) [130213] Audio, SMPS and other dribble
by "Tracy Markham" <tracy@bytemark.com>
- 4) [130214] RE: Audio, SMPS and other dribble
by "Tracy Markham" <tracy@bytemark.com>
- 5) [130215] RE: Experiment of reproducible results PART II
by Nick Kennedy <nkennedy@tcainternet.com>
- 6) [130216] Going Camping this weekend...
by "Trevor Jacobs" <kg6cyn@earthlink.net>
- 7) [130217] N3BJ Fox Log - Corrections ?
by "N3BJ" <N3BJ@hotmail.com>
- 8) [130218] RE: Going Camping this weekend...
by "Kory Hamzeh" <kory@avatar.com>
- 9) [130219] Wanted part deux: Add the TS830 or TS830s to the list
by Wayne Scace <WM-Scace@wiu.edu>
- 10) [130220] Re: Junk box suggestions - Index for The Electronic Data Book...
by Jim Larsen - AL7FS <AL7FS@arrl.net>
- 11) [130221] OT: Summer Fires
by Brian Kassel <bkassel@mato.com>
- 12) [130222] FS: SW-30
by "George Osier" <gosier@twcny.rr.com>
- 13) [130223] RE REGULATIONS...
by hamjoel@juno.com
- 14) [130224] Re: Offence under US code Title 47, Sec 227(b) (1) (C)
by Bill Coleman <aa4lr@arrl.net>
- 15) [130225] RE: reproducible conjugate results, PART 99.5 (now even longer)
by Nick Kennedy <nkennedy@tcainternet.com>
- 16) [130226] Re: Audio, SMPS and other dribble
by David Hinerman <WD8CIV@worldnet.att.net>
- 17) [130227] Re: Offence under US code Title 47, Sec 227(b) (1) (C)
by John Seboldt <k0jd-l@seboldt.net>
- 18) [130228] Re: Going Camping this weekend...
by "Trevor Jacobs" <kg6cyn@earthlink.net>
- 19) [130229] FOR SALE - Update

- by <mgoins@usa.net>
- 20) [130230] Re: Transistors in the junk box
by "Mark J. Dulcey" <mark@buttery.org>
 - 21) [130231] Ten-Tec 217 CW Filter Information
by Jim Larsen - AL7FS <AL7FS@arrl.net>
 - 22) [130232] RE: VHDL for CW
by Howard Rubin <hrubin1970@comcast.net>
 - 23) [130233] Linear amp biasing?
by W2EB <w2eb@twcnny.rr.com>
 - 24) [130234] RE: Stacked Toroids, fewer turns
by Nick Kennedy <nkennedy@tcainternet.com>
 - 25) [130235] Rock-mite Rhymin'
by Kenneth Hoglund <hoglund@wfu.edu>
 - 26) [130236] Clear the air
by "Karl F. Larsen" <k5di@zianet.com>
 - 27) [130237] SW-30 sold.....
by "George Osier" <gosier@twcnny.rr.com>
 - 28) [130238] Finding on the ARRL Web Page
by "Karl F. Larsen" <k5di@zianet.com>
 - 29) [130239] Re: Ten-Tec 217 CW Filter Information
by K5BDZ@aol.com
 - 30) [130240] Century 21 FS
by "johngabbard" <johngabbard@usintouch.com>
 - 31) [130241] Norcal Paddles - 2nd Request
by "William K. Harding" <k4ahk@ix.netcom.com>
 - 32) [130242] Offence speaking of....
by "Charles Mabbott" <aa8vs@msn.com>
 - 33) [130243] Century 21 SOLD...thanks KF7OM
by "johngabbard" <johngabbard@usintouch.com>
 - 34) [130244] Re: Junk box suggestions
by "John W. Nall" <nally@talstar.com>
 - 35) [130245] K2 for trade
by Jim Crooke <crooke@prodigy.net>
 - 36) [130246] OHR WM-1 <-> WM-2
by "Ingo Meyer, DK3RED" <dk3red@t-online.de>
 - 37) [130247] Cadence student version PSPICE
by "Bert Herald" <wf7i@hotmail.com>
 - 38) [130248] Re: Norcal Paddles - 2nd Request
by Chuck Adams <k7qo@earthlink.net>
 - 39) [130249] Need Help -- Huntsville Hamfest
by "Frank Emens" <femens@hiwaay.net>
 - 40) [130250] Need 10K ten turn pot
by Karl Heimbach <kheimbach@ev1.net>
 - 41) [130251] Great CW Operator and ELMER (VA5CW)
by Wayne Williams <aa5jj@yahoo.com>
 - 42) [130252] Re: Clear the air
by "Bert Herald" <wf7i@hotmail.com>
 - 43) [130253] Source for "The Electronic Data Book for Homebrewers and QRPers" by

NA5N

- by Jim Larsen - AL7FS <AL7FS@arrl.net>
44) [130254] WTB SW-30+
by <mgoins@usa.net>
45) [130255] Re: Offence under US code ...
by William R Colbert <w5xe@juno.com>
46) [130256] Re: Clear the air
by "Karl F. Larsen" <k5di@zianet.com>
47) [130257] Re: Norcal Paddles - 2nd Request
by Steven Weber <kd1jv@moose.ncia.net>
48) [130258] FT: MfJ 901B
by "Pastor-KC1DI" <elbc@pivot.net>
49) [130259] CQC Gold Rush tomorrow
by "Marshall Emm" <mgemm@mtechnologies.com>
50) [130260] 24 hr, UTC, WWVB Clock at Wal-Mart for \$12.56
by "James R. Duffey" <jamesd1@flash.net>
51) [130261] The Answer
by "Karl F. Larsen" <k5di@zianet.com>
52) [130262] Re: 24 hr, UTC, WWVB Clock at Wal-Mart for \$12.56
by "Karl F. Larsen" <k5di@zianet.com>
53) [130263] Re: Cadence student version PSPICE
by "Ian Wilson" <ianmwilson@earthlink.net>
54) [130264] Searching QRP-L
by ARDUJENSKI@aol.com

Date: Fri, 19 Jul 2002 23:14:42 +0100
From: Wayne Scace <WM-Scace@wiu.edu>
To: "low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [130211] Wanted: TS520 or TS520s
Message-ID: <5.1.0.14.0.20020719231423.04119b10@POP3.wiu.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Hi gang,
Wayne K9DI es Sequoia here. I was just wondering if any of you
had or knew of a TS520 or TS520s that would be coming on the market? I'd
like to get my hands on one or the other. Pse email me privately.
72

Respectfully and Sincerely Yours,

Wayne M. Scace

k9di@arrl.net
k9di@qsl.net

LICQ# 315313
FISTS# 4409
QRP-L# 2313
QRPp-L# 243
FPQRP-L# 217
SOC# 452
ARS # 1,082
Zombie # 800
<http://www.qsl.net/k9di>

Date: Fri, 19 Jul 2002 23:25:52 GMT
From: na5n@zianet.com
To: qrp-l@lehigh.edu
Subject: [130212] Re: Offence under US code ...
Message-ID: <20020719232552.20763.qmail@zianet.com>
Mime-version: 1.0
Content-type: text/plain; charset="us-ascii"

W2AGN writes: (well, quoted from received SPAM)

> > > REPUBLIC OF COTE D'IVIORE, WEST AFRICA.
> > >
> > > DEPARTMENT CAME ACROSS THE SUM OF FOURTEEN MILLION
> > > UNITED STATES DOLLARS(US\$14,000,000)ONLY BELONGING TO
> > > AN INTERNATIONAL BUSINESSMAN WHO DIED ALONG WITH HIS
> > > NEXT OF KIN IN THE 5TH NOVEMBER,1997 AEROPLANE CRASH
> > > IN ABIDJAN IN WEST AFRICA.

Boy, did you get ripped!!! This same email I got was for \$40 million, not a measly \$14 mil. I answered that if his entire family wasn't a bunch of crack-smoking, dope-headed losers, maybe his dad wouldn't have crashed the %\$#@ plane in the first place. I actually got an answer assuring me this was sincere, not spam, with a huge cry baby story about his family. I told him a family filled with such jerks and losers with suddenly \$40 million to spend was a truly scary thought. Get a life.

The point is ... there are SOME things you can do to avoid spam, but it's gonna happen no matter what filters and firewalls you build. So either delete the darn things or have fun with the jerks ... in those RARE cases where your reply actually gets through to a valid address. If I do get through the first time, I have a really nice 38Meg file I send along the second. It only takes 2 seconds to delete the things, and probably months actually trying to get some legal action to stick.

72, Paul NA5N

Date: Fri, 19 Jul 2002 16:27:56 -0700
From: "Tracy Markham" <tracy@bytemark.com>
To: "QRP-L" <qrp-l@lehigh.edu>
Subject: [130213] Audio, SMPS and other dribble
Message-ID: <GNEOLGDJDOPEALHJMKLCOEPMCGAA.tracy@bytemark.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

First, thanks a billion to all of you for the pointers on audio troubleshooting. I've learned more in the last few days finding a problem than I'd leaned in a long time.

On questions regarding the voltage of the LM386, I have the LM386N-1 version. The National data sheets describe it as a 'low voltage' device, being operable from some 5 to 15 volts, if I remember. Indeed, with the side tone generator on the input through a 47k resistor and a 10 uF cap, the '386 gives clean, loud output from about 9 to 14 volts. No input, NO noise ... messes me up.

What I've learned the most is that I need to build some more bench equipment. That stupid side tone oscillator was the most useful thing I've had. Seems prudent for one to build a nice little audio function generator with an attenuable output, along with a little recovery amplifier to check audio stages. Poke in the audio to one stage, peek at the audio from it's output ...

For the 2N2053, I'm sure I put it in backwards; I thought the TAB was the collector. Oops. It appears that some transistors are a 'TO-5' and others are another config ... I got several conflicting responses in regards to what pin is the tab ... If the tab is the emitter then I put it in backwards. I'll change it out tonite, if that was the problem, then it will be solved and the audio section will be completed - if not, I guess I have more troubleshooting to do!

On an audio amp, what voltages should be present where with a signal applied, and with no signal? (2n3053 stage, Progressive / High Performance receiver by W7ZOI) In that config, did I smoke the transistor by putting it in reverse? I have plenty - I'm putting a new one in anyway.

So my questions at this point are, for future reference does anyone have a

schematic / link to a decent audio signal generator with an output attenuator that can be reproduced fairly easily?

On a separate point, what's a fairly easy to build switch mode power supply to bring 5 v to 13.8 or so? I have plenty of ferrite; have no clue what transistor to use. It will be less than a 10 watt circuit I'm sure - 20 tops. Is there much to using a 555 to set the switch freq? I'm not stuck on anything efficient hi, more in something I can reproduce with stuff in my bag o parts or grab from RS cheap. And it would be nice to make one that doesn't flatten a receiver ...

Last dribble, I'm sure I'll have my little receiver debugged this evening or at least this weekend. I've got a lot more room on the board left over than I thought there would be, so I'm going to build a 1 or 2 watt amplifier, class C, on it. I'm thinking a pair of '5109s ... in the QRP notebook by the late Mr. DeMaw, he has a class C schematic of two MRF475's for a class c amp. What component changes would one need to make to put the 5109 in that circuit? I'm sure it's something to do with the input impedance, AI was planning on changing turns on the secondary of the input and primary of the output to get whatever I can out of it ... seems cool? I just don't want to use class A output on a CW only transmitter ...

I love being a nut, learn so much ... you guys is great
Tracy N4LGH

Date: Fri, 19 Jul 2002 16:51:51 -0700
From: "Tracy Markham" <tracy@bytemark.com>
To: "QRP-L" <qrp-l@lehigh.edu>
Subject: [130214] RE: Audio, SMPS and other dribble
Message-ID: <GNEOLGDJDOPEALHJMKLCIEPNCGAA.tracy@bytemark.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Oops ... 2n3053 ...
Tracy N4LGH

For the 2N2053, I'm sure I put it in backwards;

Date: Sat, 20 Jul 2002 18:57:04 -0500
From: Nick Kennedy <nkennedy@tcainternet.com>
To: "'w5yr@att.net'" <w5yr@att.net>,
Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [130215] RE: Experiment of reproducible results PART II
Message-ID: <01C2301F.3D5E39E0.nkennedy@tcainternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Man, people are settin' filters because of a technical discussion on QRP-L!
Chuck Adams would turn over in his grave, except that he's alive and well
and writing a technical tutorial.

Anyway, here we go ...

-----Original Message-----

From: George, W5YR [SMTP:w5yr@att.net]

>Nick, I have to take back your 50-ohm resistor prize.

That's OK--it had too much reactance in it anyway.

>To save words here,
>let me suggest that you look at Reflections for the gory details, but the
>maximum transfer of power at a conjugately match junction in a system of
>linear LLFPB two-terminal pair networks is not the same thing as the
>maximum power transfer theorem concerning conjugately matching a complex
>load to a complex source impedance.

I've been through Reflections a time or two. Very interesting, but
hey--you're introducing some new terms and concepts without details.
What's an LLFPB and how does this different kind of conjugate match differ
from the ordinary kind that the rest of us are talking about?

>In the latter case, the proper match ensures 50% efficiency at best since
>the load can consume only half the power being delivered by the source.
But
>in a conjugately matched network of networks, if the networks are lossless
>then all the power input to the system is conserved and in the case of a
>lossless tuner/feedline/antenna system all the power delivered by the
>source (transmitter) will be radiated by the antenna.

OK--I'm hip to the regular kind where you get 50% efficiency. Now you say
this other kind has all lossless components and it's lossless. I guess
that's kind of self-defining, isn't it? You don't even need a theorem or
math to demonstrate that there won't be any loss in lossless components.

What is a conjugately matched network of networks? An example might work better than a book definition.

>In this case, the source delivers its Maximum *Available* Power which
>differs from the Maximum Power it can deliver. The distinction is that the
>load resistance is chosen in the first case to obtain the most power that
>the transmitter can deliver and still meet specs on power output,
>efficiency and distortion. In the second case, all that goes out the
>>window and the transmitter just "gives its all" with attendant bad
results.

I'm really having trouble with these two kinds of maximum power--the kind you get from circuit theory in a matched condition and the other kind. I'm getting the feeling that the other kind is kind of "soft". It might be limited by the amount of distortion, life of the tube, or the fact that the contest says don't exceed 5 watts. (Well, I guess that's really what you said.) That's all good stuff but it kind of strays from the rigorous path of network theory and math and stuff like that. Are we conjugately matching something or not?

>No, we aren't ever after Maximum Power Transfer in the classical sense
with
>our amplifiers. But the load resistance we afford them determines how much
>of their Maximum Available Power can be taken. And all of that power that
>is applied to a lossless tuner/feedline/antenna system is radiated.

Again, I surely can't argue with that last statement. Now, what was it that you were disagreeing with?

72--Nick, WA5BDU

[Regarding my crack about filters--I was just kidding. I don't have time to read every technical post myself and I delete a lot of 'em.]

73/72/00, George W5YR - the Yellow Rose of Texas

Nick Kennedy wrote:

>
> Bill-
>
> Not necessarily supporting all of Karl's views here, but ...
>
> Just because I don't believe that providing the transmitter with its
> required 50 ohm load necessitates a conjugate match to the transmitter's
> internal impedance, doesn't mean I disagree with the conjugate matching

> theorem. (I CAN have it both ways!)

>

> The conjugate matching theorem is easy to see and irrefutable. However, it

> describes a point of maximum power transfer from a source, with 50% efficiency. This is not always the case and not always desired with real world transmitters.

Date: Fri, 19 Jul 2002 17:05:14 -0700
From: "Trevor Jacobs" <kg6cyn@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [130216] Going Camping this weekend...
Message-ID: <00d301c22f81\$20af9620\$0e9fb2d1@tjnotebook>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Gang,

Getting ready to head out to Pyramid Lake (NE of Los Angeles) for a weekend camping trip. Just got the ol' '76' K5 Blazer checked out and she's ready for the trip. I'm taking the DSW-40, my FT-817, a 12V 3 AH Gell Cell, my portable 100' Center Fed Zep (I love this antenna!, it's fed with the cheapest Rat Shack TV Twin lead, the radiators are insulated #24 stranded hook up wire, and I tune it with a small MFJ-971 tuner, and it always provides great results! I've even worked Europe on it on 10!), my W6JAZ mini paddles, an Easy Hang (a must for wire antennas!), log book and other assorted odds and ends to play with. I'm also taking a bunch of wire in hopes of experimenting with a 40 meter loop, time permitting. Oh, and just in case there's no place to hang a wire antenna, I've got my MP-1 vertical.

So, you guys have a great weekend and give me a shout if you hear me on the bands. Probably be on 20 and 40 in the usual areas for CW, although I may try some SSB as a couple of the people I'm campin' with have expressed interest. I'll be on the internet for the next couple of hours while I'm packing the truck and waiting for the YL to finish up at work, so if you'd like to set up a sched, let me know. BTW I was going to take a listen for the USS Kidd W5KID this weekend, as that'd be a fun QSO from the camp site. Hope their special event goes well.

73's Trev KG6CYN
<http://home.earthlink.net/~kg6cyn>
<http://www.qsl.net/kg6cyn>

Date: Fri, 19 Jul 2002 20:09:14 -0400
From: "N3BJ" <N3BJ@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [130217] N3BJ Fox Log - Corrections ?
Message-ID: <0E366uh2ueNjPSFwULn00002b41@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Please let me know if I busted an exchange, a little noisy here last night with some storms in the region.

Notable is the lack of W/VE 1,2,3 or W8 district stations, just too close for 20M with current conditions.

Worked K3PH, VE3FAL and K8HJ for the extent of the action North and North East of this QTH. K4FB in FL was water weak here, but he made the trip.

Did work LZ1RS, UT50A and WL7CDC as DX and WA8NTA/M and K5JHP/M on the road.

Thanks to all, it was great, and a very orderly group, looking forward to my next stint.

Time	Call	RST	SPC	Name	Power
0200	K5ZTY	559	TX	Bill	5W
0200	WA9TZE	579	WI	Jim	5W
0201	W5TB	559	TX	Doc	5W
0202	K5DW	559	TX	Don	5W
0202	W9XU	559	WI	Lon	5W
0203	NK9G	559	WI	Rick	5W
0204	N1FN	579	CO	ET	5W
0205	N9IJ	559	IL	Len	5W
0206	N5ZE	559	TX	Lew	5W
0206	WA8NTA/M	559	CO	Dick	5W
0207	WR50	559	TX	Dave	5W
0208	K5OI	559	OK	Tim	5W
0209	VE4WI	559	MB	Craig	5W
0210	N9NE	559	WI	Todd	100mW
0211	K8HJ	559	MI	John	4W
0212	K9IUA	559	WI	Kevin	5W
0212	WE9K	559	WI	Glenn	5W
0213	VE5RC/W7	559	MT	Bruce	5W
0214	N0UR	559	MN	Jim	5W
0214	AG0T	559	ND	Todd	4W

0215	KB7WW	559 OR Art 5W
0215	K5TR	579 TX Geo 1W
0216	W9HL	559 IL Randy 5W
0217	K4TJD	559 GA Tom 5W
0218	VE6EX	559 AB Dan 5W
0219	NQ7X	559 AZ Floyd 5W
0219	W5YR	559 TX George 5W
0220	NK6A	559 CA Don 5W
0221	AA4LR	559 GA Bill 5W
0221	NM5M	559 TX Eric 5W
0222	W5USJ	559 TX Chuck 5W
0223	AA50	559 LA Vern 5W
0224	K4GT	559 GA Jim 5W
0224	KD5KXF	559 TX Mike 5W
0225	VA6RF	559 AB Earl 5W
0225	K5EOA	559 LA Wayne 5W
0226	W0CH	559 MO Dave 5W
0227	NN5E	559 TX Vern 5W
0228	KI0II	559 CO Ron 5W
0229	N0JRN	559 MO Jerry 5W
0230	KG6CYN	559 CA Trevor 5W
0231	K5JHP/M	559 TX Bill 5W
0231	N0IT	559 MO Dave 5W
0232	VE3FAL	559 ON Fred 5W
0233	NQ7K	559 AZ Mike 5W
0234	AK7Y	559 AZ Greg 5W
0245	AB9CA	559 AL Dave 5W
0237	N0HRL	559 MN Ken 5W
0238	N0TK	559 CO Dan 5W
0240	K5LN	559 TX Bill 5W
0241	AJ4AY	559 AL Jay 5W
0244	VE7HHH	559 BC Blair 10W
0250	KG4CHX	559 NC Tim 5W
0256	LZ2RS	559 LZ Rumi 5W
0258	N6VZ	559 CA Gary 5W
0300	K5ZJ	559 TX Pat 5W
0302	AK7D	559 OR Fred 5W
0306	KI0RB	559 CO Vince 5W
0310	AA0B	559 MO Roy 5W
0312	KB0LUR	559 CO Paul 5W
0314	K5SR	559 TX Dale 5W
0315	N5IB	559 LA Jim 5W
0320	AD6JV	559 CA Bill 5W
0325	N4DD	549 TN Dennis 5W
0326	K0FRP	579 CO Al 5W
0328	KJ0C	559 MO Jim 5W
0332	UT50A	559 UB Nick 5W
0338	K3PH	549 PA Bob 5W

0340 WL7CDC 559 AK Doug 5W
0345 N7BVY 559 WA Steve 5W
0349 K4FB 549 FL Paul 5W
0352 W7AQK 559 AZ Dave 5W
0359 N3BJ 599 VA Alan 5W

Alan, N3BJ
Bent Mountain, VA

Date: Fri, 19 Jul 2002 17:51:36 -0700
From: "Kory Hamzeh" <kory@avatar.com>
To: <kg6cyn@earthlink.net>,
 "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [130218] RE: Going Camping this weekend...
Message-ID: <002501c22f87\$99fd4d00\$14ce21c7@avatar.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Trev,

Let us know what its like. I go camping at Lake Cachuma alot. Not a lot of tall trees there for hanging antennas. I've been meaning to check out Pyramid Lake.

73,
Kory
AC6RN

> -----Original Message-----
> From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU]On Behalf Of
> Trevor Jacobs
> Sent: Friday, July 19, 2002 5:05 PM
> To: Low Power Amateur Radio Discussion
> Subject: Going Camping this weekend...
>
>
> Hi Gang,
>
> Getting ready to head out to Pyramid Lake (NE of Los Angeles) for
> a weekend
> camping trip. Just got the ol' 76' K5 Blazer checked out and
> she's ready for
> the trip. I'm taking the DSW-40, my FT-817, a 12V 3 AH Gell Cell, my
> portable 100' Center Fed Zep (I love this antenna!, it's fed with the

> cheapest Rat Shack TV Twin lead, the radiators are insulated #24 stranded
> hook up wire, and I tune it with a small MFJ-971 tuner, and it always
> provides great results! I've even worked Europe on it on 10!), my
> W6JAZ mini
> paddles, an Easy Hang (a must for wire antennas!), log book and other
> assorted odds and ends to play with. I'm also taking a bunch of wire in
> hopes of experimenting with a 40 meter loop, time permitting. Oh, and just
> in case there's no place to hang a wire antenna, I've got my MP-1
> vertical.
>
> So, you guys have a great weekend and give me a shout if you hear
> me on the
> bands. Probably be on 20 and 40 in the usual areas for CW, although I may
> try some SSB as a couple of the people I'm campin' with have expressed
> interest. I'll be on the internet for the next couple of hours while I'm
> packing the truck and waiting for the YL to finish up at work, so if you'd
> like to set up a sched, let me know. BTW I was going to take a listen for
> the USS Kidd W5KID this weekend, as that'd be a fun QSO from the
> camp site.
> Hope their special event goes well.
>
> 73's Trev KG6CYN
> <http://home.earthlink.net/~kg6cyn>
> <http://www.qsl.net/kg6cyn>
>
>
>

Date: Sat, 20 Jul 2002 01:22:44 +0100
From: Wayne Scace <WM-Scace@wiu.edu>
To: "low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [130219] Wanted part deux: Add the TS830 or TS830s to the list
Message-ID: <5.1.0.14.0.20020720012220.042d6aa8@POP3.wiu.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Hi gang,
Wayne K9DI es Sequoia here. Pse add the TS830 and TS830s to the
list es agn pse email me privately. However, pse do not advise me to look
on ebay I prefer to deal with Hams.
73/72

Respectfully and Sincerely Yours,

Wayne M. Scace

k9di@arrl.net
k9di@qsl.net
LICQ# 315313
FISTS# 4409
QRP-L# 2313
QRPp-L# 243
FPQRP-L# 217
SOC# 452
ARS # 1,082
Zombie # 800
<http://www.qsl.net/k9di>

Date: Fri, 19 Jul 2002 17:47:09 -0800
From: Jim Larsen - AL7FS <AL7FS@arrl.net>
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [130220] Re: Junk box suggestions - Index for The Electronic Data Book...
Message-ID: <3D38C11D.84266119@ARRL.NET>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Brian, KB9BVN, wrote:

> I would add this to any junkbox:

> "The Electronic Data Book for Homebrewers and QRPers"

> by Paul Harden NA5N

=====

If you buy this book, and it IS excellent, you may enjoy the index I prepared for it. It can be found at my website at <http://www.qsl.net/al7fs/> .

73, Jim
Jim Larsen, AL7FS, Anchorage, Alaska
(BP51cc) - 61.101 North, 149.824 West
ex-WA0LPK AK-QRP#003 SOC#003 10-X-#12094
<mailto:al7fs@arrl.net> - <http://www.qsl.net/al7fs/>

Date: Fri, 19 Jul 2002 19:28:29 -0700

From: Brian Kassel <bkassel@mato.com>
To: QRP-L <QRP-L@lehigh.edu>, rod@n0rc.us
Subject: [130221] OT: Summer Fires
Message-ID: <3D38CACD.324C86DC@mato.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gangue:

Yes, this off topic, but many QRP ops enjoy camping and operating out in these areas in better, happier times.

I just wanted to say that I am in deep sympathy with my AZ, NM and CO friends who have suffered through a terrible fire season. There are few sites as sad as seeing countless acres of forest consumed by fires. It is exceedingly frustrating to know that many were started on purpose. It is devastating to see ones house and life long belongings disappear in mere minutes.

I know that you guys will prevail, you have before, and will again. We are finally beginning to see rain at night here in the Northern Black Hills. I still easily pick up the odor of burning forest though, from several relatively smaller fires still working in the distance.

Oh yea, and for those who purposely began the fires, and took innocent lives in the act:

May the fires of hell burn brighter than any fire that you ever imagined. You won't have to worry about starting those fires, they have been going well now for along, long time. ;)

I feel much better now ;)

Have a nice Day ;)

Brian K7RE
Spearfish SD
In the Black Hills

Date: Fri, 19 Jul 2002 22:39:49 -0400
From: "George Osier" <gosier@twcnny.rr.com>
To: <qrp-l@lehigh.edu>
Subject: [130222] FS: SW-30
Message-ID: <001a01c22f96\$b989a240\$25624342@twcnny.rr.com>
MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello !!!!!

I have a SW-30 in excellent condx , used little , need to sell for software
for contesting.....

\$70.00 I ship

73s

George Osier , N2JNZ / QRP

Date: Fri, 19 Jul 2002 22:25:27 -0400
From: hamjoel@juno.com
To: qrp-l@lehigh.edu
Subject: [130223] RE REGULATIONS...
Message-ID: <20020719.230113.-236581.0.hamjoel@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

FOR THE DESIRED COMMUNICATION

CAN BE INTERPETED AND IS INTERPETED MANY WAYS...

if I desire a good solid signal, one in the 20 to thirty over area,
strong enough to block most intefering singnals
then the legal limit is a good choice to achieve the desired
communications. nice when using slow scan tv or band is crowded or heavy
qsb....

If the desired communication is a barely readable signal, then any
amount of power that gets more than a 33 report is too much power...

"desired communications" the interpetation of this phrase determines
what's too much and what's not enough.

I like 59 signal reports ... and I get em without using much power...
sometimes milliwatts sometimes watts....
however we're now talking about good, (gain?) ant... and so the story
goes....

I kneaux , unless u got u-self a burried mini dipole with n22 wire... u
an't qrp....so what's a decent signal strength to shoot for? 22, 33, 44,
55 over or under s9....

U due kneaux the worse u signal is, the meaux work u causing the guy on
the utter end.... and using cw, which most of us do, most of the time...
u can have a good 55 signal or better with a good ant and 5 watts or less

output...

"for the desired communication" is like saying the word "Love"...
confuses everybody....
best to just geaux build sumthin and let the lawyers work on power
needed....

kella joel

in maine

Using the minimum pound test line necessary
for the desired species of fish to catch..

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<http://dl.www.juno.com/get/web/>.

Date: Fri, 19 Jul 2002 23:09:25 -0400

From: Bill Coleman <aa4lr@arrl.net>

To: <k5di@zianet.com>,

"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>

Subject: [130224] Re: Offence under US code Title 47, Sec 227(b) (1) (C)

Message-ID: <20020720031057.BZA022515.imf17bis.bellsouth.net@[192.168.0.20]>

Mime-Version: 1.0

Content-Type: text/plain; charset="US-ASCII"

On 7/19/02 12:53 PM, Karl F. Larsen at k5di@zianet.com wrote:

>

> Please loosen up. Scam is all over the place. I have passed up
> millions of dollars in the past months. Use your delete key.

Amen, Karl, amen!

Bill Coleman, AA4LR, PP-ASEL Mail: aa4lr@arrl.net

Quote: "Not within a thousand years will man ever fly!"

-- Wilbur Wright, 1901

Date: Sat, 20 Jul 2002 22:16:28 -0500

From: Nick Kennedy <nkennedy@tcainternet.com>

To: "'leinwebe@mcmail.cis.mcmaster.ca'" <leinwebe@mcmail.cis.mcmaster.ca>,

Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>

Subject: [130225] RE: reproducible conjugate results, PART 99.5 (now even longer)

Message-ID: <01C2303B.18F1D1E0.nkennedy@tcainternet.com>

MIME-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Content-Transfer-Encoding: 7bit

-----Original Message-----

From: Glen Leinweber [SMTP:leinwebe@mcmail.cis.mcmaster.ca]

>Let's now take a linear case, where a 50 ohm antenna feeds a
>small signal into a receiver's input stage. Surely conjugate
>matching applies here.

I'll bet you're right. Anybody ever taken their MFJ-259B and looked INTO the rig? I have. (Keep your hand away from the key when you do this.) As I recall, the FT-1000 showed pretty close to 1:1, indicating that a match (conjugate, if you wanna get complex) to the antenna was the design goal.

And I did something similar on the 2N2/40. I think Jim had designed the preamp to have an input Z of 50 ohms, so I tweaked the front end resonators again to give 50 ohms looking into the rig in the receive mode.

I'm a believer in conjugate matching. But in general on receive only.

72--Nick, WA5BDU

Date: Fri, 19 Jul 2002 23:28:23 -0400

From: David Hinerman <WD8CIV@worldnet.att.net>

To: qrp-l@lehigh.edu

Subject: [130226] Re: Audio, SMPS and other dribble

Message-ID: <5.1.0.14.1.20020719231247.00b32f48@postoffice.worldnet.att.net>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"; format=flowed

At 04:27 PM 7/19/2002 -0700, you wrote:

>On questions regarding the voltage of the LM386, I have the LM386N-1
>version. The National data sheets describe it as a 'low voltage' device,
>being operable from some 5 to 15 volts, if I remember. Indeed, with the side
>tone generator on the input through a 47k resistor and a 10 uF cap, the '386
>gives clean, loud output from about 9 to 14 volts. No input, NO noise ...
>messes me up.

Tracy,

I'm a bit confused. Like you, I thought the '386 generated a noticeable amount of hiss. I built a headphone amp for my guitar foom one, and quit using it because of the hiss. Maybe the hiss is coming from the gain-limiting feedback.

>What I've learned the most is that I need to build some more bench
>equipment. That stupid side tone oscillator was the most useful thing I've
>had. Seems prudent for one to build a nice little audio function generator
>with an attenuable output, along with a little recovery amplifier to check
>audio stages. Poke in the audio to one stage, peek at the audio from it's
>output ...

Excellent ideas. A scope does well for the output tracing, but a small amp & speaker can tell a lot more about quality of audio.

>receiver by W7Z0I) In that config, did I smoke the transistor by putting it
>in reverse? I have plenty - I'm putting a new one in anyway.

You probably didn't hurt the old one. Installed normally, the base-emitter junction conducts and the base-collector junction doesn't. Swapping E and C would end up with both junctions reverse biased. (I think. Go with the new part anyway.)

>So my questions at this point are, for future reference does anyone have a
>schematic / link to a decent audio signal generator with an output
>attenuator that can be reproduced fairly easily?

How complex do you want it? The ICL8038 is a waveform generator that outputs square, triangle, and a fair sinewave. Frequency is set with an R (pot) and a C, and there's also a control voltage input. Another pot would do as an attenuator. Datasheets and app notes are all over the Web. The part was made by Intersil. I think Jameco may have even had a function generator kit for it at one time.

>On a separate point, what's a fairly easy to build switch mode power supply
>to bring 5 v to 13.8 or so? I have plenty of ferrite; have no clue what
>transistor to use. It will be less than a 10 watt circuit I'm sure - 20
>tops. Is there much to using a 555 to set the switch freq? I'm not stuck on
>anything efficient hi, more in something I can reproduce with stuff in my
>bag o parts or grab from RS cheap. And it would be nice to make one that
>doesn't flatten a receiver ...

Whew. Switching converters are fun to design and build. I keep telling myself that. I don't know anyone that's used a 555 as the controller. Most people use a dedicated switcher controller. You could try snooping around National Semiconductor's Web site for app notes. They make a bunch of that stuff.

Dave

"You can fool some of the people all of the time. That's enough to make a living." - Lance Burton

Dave Hinerman
WD8CIV@att.net

Date: Fri, 19 Jul 2002 22:48:57 -0500
From: John Seboldt <k0jd-1@seboldt.net>
To: qrp-1@lehigh.edu
Subject: [130227] Re: Offence under US code Title 47, Sec 227(b) (1) (C)
Message-ID: <5.1.0.14.0.20020719224155.00a244e0@seboldt.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 11:48 AM 7/19/02 -0400, you wrote:

>Offence under US code Title 47, Sec 227(b) (1) (C)
>I have recently received UNSOLICITED and UNWANTED junk e-mail from an

Hey, lighten up. Spam is always with us.

But a few things you can do:

forward the thing, with full headers, to
abuse@<WhateverDomainIsInTheReturnAddress.whatever>

Get MailWasher - www.mailwasher.net - you can get just subject lines off your server, the program suggests what might be spam, and send a message that makes it look "bounced" from an invalid address.

Get SamSpade - www.samspade.org - great tool for tracing net addresses for forged headers, all kinds of net tools

John Seboldt K0JD
Milwaukee

Date: Fri, 19 Jul 2002 20:47:28 -0700

From: "Trevor Jacobs" <kg6cyn@earthlink.net>
To: "Kory Hamzeh" <kory@avatar.com>,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [130228] Re: Going Camping this weekend...
Message-ID: <001d01c22fa0\$2bce2c00\$9492b2d1@tjacobs>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Sure will, got the 01' Blazer packed now and the YL just got back from work so I'm outa here...

73's Trev KG6CYN

----- Original Message -----

From: Kory Hamzeh <kory@avatar.com>
To: <kg6cyn@earthlink.net>; Low Power Amateur Radio Discussion
<qrp-1@Lehigh.EDU>
Sent: Friday, July 19, 2002 5:51 PM
Subject: RE: Going Camping this weekend...

> Hi Trev,
>
> Let us know what its like. I go camping at Lake Cachuma alot. Not a
lot of
> tall trees there for hanging antennas. I've been meaning to check out
> Pyramid Lake.
>
> 73,
> Kory
> AC6RN
>
> > -----Original Message-----
> > From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU]On
Behalf Of
> > Trevor Jacobs
> > Sent: Friday, July 19, 2002 5:05 PM
> > To: Low Power Amateur Radio Discussion
> > Subject: Going Camping this weekend...
> >
> >
> > Hi Gang,
> >
> > Getting ready to head out to Pyramid Lake (NE of Los Angeles) for
> > a weekend
> > camping trip. Just got the 01' 76' K5 Blazer checked out and

> > she's ready for
> > the trip. I'm taking the DSW-40, my FT-817, a 12V 3 AH Gell Cell,
my
> > portable 100' Center Fed Zep (I love this antenna!, it's fed with
the
> > cheapest Rat Shack TV Twin lead, the radiators are insulated #24
stranded
> > hook up wire, and I tune it with a small MFJ-971 tuner, and it
always
> > provides great results! I've even worked Europe on it on 10!), my
> > W6JAZ mini
> > paddles, an Easy Hang (a must for wire antennas!), log book and
other
> > assorted odds and ends to play with. I'm also taking a bunch of wire
in
> > hopes of experimenting with a 40 meter loop, time permitting. Oh,
and just
> > in case there's no place to hang a wire antenna, I've got my MP-1
> > vertical.
> >
> > So, you guys have a great weekend and give me a shout if you hear
> > me on the
> > bands. Probably be on 20 and 40 in the usual areas for CW, although
I may
> > try some SSB as a couple of the people I'm campin' with have
expressed
> > interest. I'll be on the internet for the next couple of hours
while I'm
> > packing the truck and waiting for the YL to finish up at work, so if
you'd
> > like to set up a sched, let me know. BTW I was going to take a
listen for
> > the USS Kidd W5KID this weekend, as that'd be a fun QSO from the
> > camp site.
> > Hope their special event goes well.
> >
> > 73's Trev KG6CYN
> > <http://home.earthlink.net/~kg6cyn>
> > <http://www.qsl.net/kg6cyn>
> >
> >
> >
>

Date: Fri, 19 Jul 2002 23:33:22 -0500

From: <mgoins@usa.net>
To: <qrp-1@lehigh.edu>
Subject: [130229] FOR SALE - Update
Message-ID: <20020720043322.5960.qmail@uwdvg001.cms.usa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable

Datong FL-3 - SOLD
LDG Z-11 - TRADED.
AEA Contester CK-2 - SOLD
HTX 200, mini-2 meter HT - TRADED
MFJ powerstrip - SOLD

- * KLM 70 watt amp for 2 meters. looks good. \$65.00
- * Kenwood SP-40 speaker. Original box. Excellent. \$60.00
- * Kenwood TS-440S. Have manual, original double box. \$450.00
- * Pyramid PS-36K power supply. Very good. Used to power everything in the station. Will not sell except with the 440, or after the 440 sells. \$120.00 (heavy)
- * Cubex spiders (old) for use with a 2" boom (no boom). =
- * Also have eight one-piece, heavy-duty spreaders (for use with a 10-20 = meter quad). Make offer.

Would prefer local buyer for the Kenwood 440, the Pyramid power supply, and the quad spreaders (heavy or difficult to ship). All prices are plus freight.
Thanks.

mike
wb5yjx

Date: Sat, 20 Jul 2002 01:00:21 -0400
From: "Mark J. Dulcey" <mark@buttery.org>
To: ZarubaJr@aol.com

Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [130230] Re: Transistors in the junk box
Message-ID: <3D38EE65.7060606@buttery.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

ZarubaJr@aol.com wrote:

> Hi Gang,
>
> What's the group opinion on transistor types to have in the junk box?
>
> I currently have 2N2222A's, MPF102's, 2N3906's, and 2N3904's. Any other types
> I should consider getting? 2N7000's perhaps?

Small MOSFETs like the 2N7000 do seem to be taking over switching chores from other types of transistors; I've seen them in a lot of recent designs. So the 2N7000 would certainly be a good addition to your collection.

If you have the budget to stock a few larger-signal transistors, you might want to add some heftier parts as well. The ubiquitous 2N3055, used as a pass transistor in many power supply designs, is one candidate, and you can sometimes pick them up cheaply at hamfests. The 2N5109, used as a high dynamic range RF amplifier, is another nice part to have around, but I haven't seen any bargains on those. Some bigger MOSFETs such as the IRF510 are also handy (and that particular part has also been used successfully as an RF amplifier).

Date: Sat, 20 Jul 2002 00:18:34 -0800
From: Jim Larsen - AL7FS <AL7FS@arrl.net>
To: "qrp-l@lehigh.edu" <qrp-l@lehigh.edu>
Subject: [130231] Ten-Tec 217 CW Filter Information
Message-ID: <3D391CDA.D619DC40@ARRL.NET>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Greetings from Alaska,

Several people were looking for information on the Ten-Tec 217 CW filter. I have added a page to my website at <http://www.qsl.net/al7fs/> with some photos and component data. I hope it helps. It may take a bit to download as the specification sheets are included.

73, Jim

--

Jim Larsen, AL7FS, Anchorage, Alaska
(BP51cc) - 61.101 North, 149.824 West
ex-WA0LPK AK-QRP#003 SOC#003 10-X-#12094
mailto:al7fs@arrl.net - <http://www.qsl.net/al7fs/>

Date: Sat, 20 Jul 2002 06:04:31 -0400
From: Howard Rubin <hrubin1970@comcast.net>
To: Leon Heller <leon_heller@hotmail.com>
Cc: qrp-l@lehigh.edu
Subject: [130232] RE: VHDL for CW
Message-ID: <NGBBIJLJALHNLHMDICMPEEEENCIAA.hrubin1970@comcast.net>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

Leon, thanks!

The Cypress device is a CY37256 and the Xilinx is one of the Virtex-II family.

I'd like to hear more about these CPUs in VHDL. Are they 8bit processors? Is there an compiler-assembler available to develop programs for them? Is there a tiny ROM monitor I can use for diagnostic purposes? Something that would dump memory, read registers, execute from a starting address, etc.

Howard, N3FEL

Date: Sat, 20 Jul 2002 07:35:19 -0500
From: W2EB <w2eb@twcnny.rr.com>
To: qrp-l@lehigh.edu
Subject: [130233] Linear amp biasing?
Message-ID: <3D395907.A2B7DE5E@twcnny.rr.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gang,

If I wanted to build a small (QRP) class AB linear amplifier, how

would I know how much bias current to provide?

I don't own a spectrum analyzer or have access to one, thus I can't look for/minimize distortion on the amp's output.

IOW, "Is there an indirect way of determining when you have just the right amount of bias?"

73,

Bill
W2EB

Date: Sat, 20 Jul 2002 22:45:37 -0500
From: Nick Kennedy <nkennedy@tcainternet.com>
To: "'n6wg@earthlink.net'" <n6wg@earthlink.net>,
Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [130234] RE: Stacked Toroids, fewer turns
Message-ID: <01C23080.F18A1220.nkennedy@tcainternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

That's interesting. I would have expected closer to the 2:1 ratio. I wonder what you would have if you measured both individually? They say the permeability of ferrite varies quite a bit for the same mix type. But I wouldn't expect that much in the same lot ...

I just did another check with a couple of unidentified ferrite toroids that look like big fat beads. 3/4 inches tall, 7/8 in OD and 5/16 in ID. I put on 6 evenly space turns--

#1: 2.259 uH
#2: 2.250 uH
stacked: 4.485 uH

Adhered pretty well to the 2:1 in this case: Ratio of both to average of two: 1.99

72--Nick, WA5BDU

-----Original Message-----

From: Bob Tellefsen [SMTP:n6wg@earthlink.net]

Chuck

I just finished checking this idea with some ferrite toroids.

They are a non-standard size, possibly from a special run for some mfr.
These cores are claimed to be type 43 ferrite, OD 1.22", ID .72", HT .62"

I wound one core with 5 turns of #24 telco wire (pulled from an old cable
of
50 pairs), with the turns spaced a wire diameter. My AADE LC II/B says
28.9uH.
Then I rewound two units with the same five spaced turns and got 81.5uH.

As someone else observed, a small number of turns doesn't scale up very
linearly.

Date: Sat, 20 Jul 2002 00:16:19 -0400
From: Kenneth Hoglund <hoglund@wfu.edu>
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [130235] Rock-mite Rhymin'
Message-ID: <3D38E413.3489C5E8@wfu.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

There once was an op with a Rock-mite
Who liked his radio qrp-lite;
With milliwatts out
He never did pout,
And had DXCC in a fortnight.

73,

Ken KG4FGC

Date: Sat, 20 Jul 2002 06:10:07 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: qrp-l@lehigh.edu
Subject: [130236] Clear the air
Message-ID: <Pine.LNX.4.44.0207200551520.1649-1000000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I know for a fact that my radios, all with transistor (or FET) finals need to see approx. 50 ohms resistive to load up to rated power.

I have a couple of MFJ 300 watt tuners that have 4:1 baluns in them and a T type tuner configuration. I have a home made (from a Dan's Small Parts kit) T type tuner with a 1:1 balun good for QRP power.

I have an 88 foot wire fed in the middle with 450 ohm ribbon. The feedline is about 50 feet long.

When the radio is hooked to a tuner with RG-59 coax, and the antenna is hooked to the balun and the balun is hooked to the T type tuner I can get 1:1 match to the radio by setting 2 caps and an inductor to the proper values.

I'm sure the radio to tuner connection is conjugate matching since it must be to achieve 1:1 SWR.

What type of matching to the antenna is my problem. Maxwell says it's also conjugate matching. If so that means the impedance at the output of the tuner is a pure resistance, the value of which I don't know, but it's not likely to be 450 ohms. And at every 1/2 wave up the feedline it's again pure resistance.

This condition is called by some as resonace. I don't understand why that defines resonance.

I'm on page 9 of the 68 page Maxwell paper. I have to check the library at NMSU and see if they have a book I need and run by the School Book Store and see if they still sell Smith Charts. They used to.

--

Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

Date: Sat, 20 Jul 2002 08:22:28 -0400
From: "George Osier" <gosier@twcnny.rr.com>
To: <qrp-1@lehigh.edu>
Subject: [130237] SW-30 sold.....
Message-ID: <000001c22fe9\$54282e00\$25624342@twcnny.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello !!!

SW-30 is soldwent VERY fast !!!!

Thanks !!!

73s

George Osier , N2JNZ / QRP

Date: Sat, 20 Jul 2002 06:37:03 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: qrp-l@lehigh.edu
Subject: [130238] Finding on the ARRL Web Page
Message-ID: <Pine.LNX.4.44.0207200630310.1649-1000000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I got a lot of good stuff on antenna things off the ARRL Web Page and it's by accident! I just happened to find the way and it is not obvious.

To get downloadable reprints of QST articles and such get on the ARRL web page as a member, and when it's up click on "Services". When that page is up click on "Technical Information". When that page is up click on "TIS Pages". For Maxwell's papers in .pdf form click "Transmission Lines/SWR" and it's all there.

--
Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

Date: Sat, 20 Jul 2002 08:53:56 EDT
From: K5BDZ@aol.com
To: AL7FS@arrl.net, qrp-l@lehigh.edu
Subject: [130239] Re: Ten-Tec 217 CW Filter Information
Message-ID: <6e.1fc14362.2a6ab764@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

Content-Transfer-Encoding: 7bit

In a message dated 07/20/2002 3:23:04 AM Central Daylight Time,
AL7FS@arrl.net writes:

> <http://www.qsl.net/al7fs/>

Jim

Thanks for the component values and other info on the TenTec filters. For those so inclined, now modifying those filters will be much easier, and hopefully we'll see postings such as "I did it with these values and here's what I got!!"

Bill K5BDZ

Date: Sat, 20 Jul 2002 06:00:31 -0700
From: "johngabbard" <johngabbard@usintouch.com>
To: <qrp-l@lehigh.edu>
Subject: [130240] Century 21 FS
Message-ID: <005101c22fed\$6ea8dc30\$68811c0c@juanita>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Nice TenTec C 21 digital cosmetically a 9, works great, \$220. shipped USPS
USA. Thanks John KF70M

Date: Sat, 20 Jul 2002 09:22:14 -0400
From: "William K. Harding" <k4ahk@ix.netcom.com>
To: "QRP-L Mail" <qrp-l@lehigh.edu>
Subject: [130241] Norcal Paddles - 2nd Request
Message-ID: <E17VuAZ-0005ub-00@smtp10.atl.mindspring.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

I asked this question a few days ago but haven't seen a response. Would
someone please let me know:

How wide is the base of the Norcal paddles. Is the current production
paddle the same width?

Thanks -

Bill - K4AHK
Burke, VA FM18

Date: Sat, 20 Jul 2002 10:22:50 -0400
From: "Charles Mabbott" <aa8vs@msn.com>
To: w2agn@w2agn.net, qrp-1@lehigh.edu
Subject: [130242] Offence speaking of....
Message-ID: <F78LuWDo45AXDZb1WxV00018cce@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Heard a great one the other night to the tune of
ta do ron ron

Looked in the account and the money was gone,
en ron ron .. en ron ron

sorry,
Back to radio

73
Chuck AA8VS

"If your not part of the solution,
there is good money to be made
prolonging the problem."

<http://68.43.100.7:81/aa8vs>

Join the world s largest e-mail service with MSN Hotmail.
<http://www.hotmail.com>

Date: Sat, 20 Jul 2002 07:38:13 -0700
From: "johngabbard" <johngabbard@usintouch.com>
To: <qrp-1@lehigh.edu>

Subject: [130243] Century 21 SOLD...thanks KF70M
Message-ID: <000501c22ffb\$1455cfa0\$63811c0c@juanita>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Date: Sat, 20 Jul 2002 10:47:30 -0400
From: "John W. Nall" <nally@talstar.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [130244] Re: Junk box suggestions
Message-ID: <003501c22ffc\$60a31600\$0100a8c0@XPSYSTEM>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I have looked around on the Internet to see if perhaps the NA5N book might be available somewhere, and cannot locate a source. (I did find a bunch of complimentary statements about it, however. :-)

Does anyone have any idea where I might be able to pick up a copy?? About \$20 seems to be the price they mentioned in the different articles, and that seems a fair price to pay if I could locate a copy.

Thanks for any help.

John AF4WM

----- Original Message -----

From: "Brian" <brian@iquest.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

> I would add this to any junkbox:
>
> "The Electronic Data Book for Homebrewers and QRPers"
> by Paul Harden NA5N

Date: Sat, 20 Jul 2002 10:05:29 -0500
From: Jim Crooke <crooke@prodigy.net>
To: qrp-l@lehigh.edu
Subject: [130245] K2 for trade
Message-ID: <5.1.0.14.0.20020720100018.0329cd08@pop3.prodigy.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Greetings,

I have 2 K2's along with other rigs and would like trade one of them for an FT-817 with cw filter. Would like the Z-11 to go with it. The K2 has the KAT2 installed and have the SSB module still in a bag unassembled. There are no mods done that I know of.
Anyone interested?

73 es oo de Jim KJ0C
Healer of Brachycephalics and other fine looking creatures
in Springfield, MO
FP # -108 and semi-official veterinarian of the Flying Pigs QRP Club
PITA #2 SOC #37

Date: Sat, 20 Jul 2002 17:31:02 +0200
From: "Ingo Meyer, DK3RED" <dk3red@t-online.de>
To: QRP-L <qrp-l@lehigh.edu>
Subject: [130246] OHR WM-1 <-> WM-2
Message-ID: <3D398236.2C914E91@t-online.de>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello OHR user,

What is the difference between the "old" WM-1 and the "new" WM-2? Only the external DC power jack and the SPDT switch on the back panel or is there more than this?

--

72/73 de Ingo, DK3RED Don't forget: the fun is the power!

dk3red@t-online.de <http://www.t-online.de/~dk3red>
DL-QRP-AG #824 <http://www.dl-qrp-ag.de>

Date: Sat, 20 Jul 2002 08:39:28 -0700
From: "Bert Herald" <wf7i@hotmail.com>
To: qrp-l@lehigh.edu
Subject: [130247] Cadence student version PSPICE
Message-ID: <F235S2ZcUnMMi2QWakW00016776@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

I figured someone on this list would know the answer.

I just downloaded the huge 27 MB student version of Cadence PSPICE from the Cadence website. I've been using a freeware "Winspice" program up till now.

I am in general a novice spice user. Winspice seems to accomodate the traditional syntax of spice statements (which I am used to from my college courses in the early 1990s) in the .CIR files. However, I cannot read those files into the Cadence program.

Not having spent any time pouring over the "help" files yet, can someone tell me if the two are not compatible? Does Cadence SPICE use a totally different syntax from the older spice statements?

Thanks and 72,

Bert WF7I

Chat with friends online, try MSN Messenger: <http://messenger.msn.com>

Date: Sat, 20 Jul 2002 15:49:20 +0100
From: Chuck Adams <k7qo@earthlink.net>
To: k4ahk@ix.netcom.com,
 "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [130248] Re: Norcal Paddles - 2nd Request
Message-ID: <5.1.0.14.0.20020720154219.009fd090@mail.earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Bill, et.al.

Here are some measurements from four paddles ---- two from NorCal and two from Vibroplex (Code Warriors).

NorCal 7.6cm x 5.8cm

NorCal 7.5cm x 6.1cm

Vibroplex 6.4cm x 7.6cm (Serial #204)

Vibroplex 6.4cm x 7.6cm (Serial #801)

The variance in the NorCal paddle is to be expected and I would not hold my breath on the Vibroplex paddles depending upon those dimensions. There will be some variance in manufacturing tolerances....

FYI,

Chuck Adams, K7QO CP-60 k7qo@earthlink.net
<http://www.qsl.net/k7qo>

Moving to Arizona? --- Bring your own water, please.

Date: Sat, 20 Jul 2002 11:19:07 -0500
From: "Frank Emens" <femens@hiwaay.net>
To: qrp-l@lehigh.edu
Subject: [130249] Need Help -- Huntsville Hamfest
Message-ID: <3D39472B.26494.B96111@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-description: Mail message body

The Huntsville Hamfest will be coming up August 17 & 18 in Huntsville, Alabama. We have time and space space for some QRP forums on the 17th and need someone to organize and arrange them.

If anybody is interested in taking that on, please get in touch with me and I'll lead you to the guy in charge of arranging the forum schedules.

TenTec is going to make an apperance in the Dealer Show (most unusual for them) and I don't know for sure, but that seems to be about the time for availability of their new Argonaut with all the DSP goodies.I'll try to explore that further.

--

Frank Emens
femens@hiwaay.net

Date: Sat, 20 Jul 2002 11:19:25 -0500
From: Karl Heimbach <kheimbach@ev1.net>
To: qrp-l@lehigh.edu
Subject: [130250] Need 10K ten turn pot
Message-ID: <5.1.0.14.2.20020720111726.00ba5008@mail.ev1.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Ladies and gents,

Started putting together my NC-20 today and discovered that my 10K ten turn pot is actually a 5K ten turn pot. Does anyone have a ten turn 10K they would like to part with?

If anyone has one, please reply off the list.

Thanks,

Karl - W5QJ

Date: Sat, 20 Jul 2002 09:37:37 -0700 (PDT)
From: Wayne Williams <aa5jj@yahoo.com>
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>, dave lugo <w5taz@beggstelco.net>,
Subject: [130251] Great CW Operator and ELMER (VA5CW)
Message-ID: <20020720163737.10729.qmail@web10501.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Hello gang I just had a QSO with Bill VA5CW that lasted 1.5 hrs, it was the longest QSO I have ever had on CW and I have been a Ham for 27 yrs. I never really

liked CODE before I just crammed and passed the 20 code test back in 1998 after that I didn't ever want to work CW again in my life hi hi, well after becoming disabled in 1998 I found my self with allot of time on my hands and decided to learn CODE all over again and am having a blast doing it and thanks to Bill I am having more fun than I thought I ever could with CW, Bill is a great ELMER so lets all get on the air and have fun getting out speed up.

We are using 14.120 to monitor so if you want to practice you will find Bill or my self listening there, 73 and again Bill thanks for being there.
Wayne AA5JJ

Do You Yahoo!?

Yahoo! Health - Feel better, live better
<http://health.yahoo.com>

Date: Sat, 20 Jul 2002 09:48:49 -0700
From: "Bert Herald" <wf7i@hotmail.com>
To: qrp-1@lehigh.edu
Subject: [130252] Re: Clear the air
Message-ID: <F62PLKpI8KCG1iVv4Zt00016951@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>I'm sure the radio to tuner connection is conjugate matching since it >must
>be to achieve 1:1 SWR.

>What type of matching to the antenna is my problem. Maxwell says it's also
>conjugate matching. If so that means the impedance at the output of the
>tuner is a pure resistance, the value of which I don't know, but it's not
>likely to be 450 ohms. And at every 1/2 wave up the feedline it's again
>pure resistance.

>This condition is called by some as resonace. I don't understand why that
>defines resonance.

Karl,

First, I'm not sure I understand the buzzword "conjugate matching", but if I am to assume that this simply means matching by coming up with the complex conjugate of the impedance of the circuit to-be-matched, ie, complex conjugate

of $R - jX = R + jX$, which when cascaded in series yields just R as an equivalent, then isn't this just everyday ordinary matching? I don't see anything particularly special about this (maybe I'm missing something?).

Also, why would the impedance of the output of the tuner be a pure resistance? It can't with 1:1 SWR at the rig unless the antenna-feed system is also a pure resistance (and then you wouldn't need a tuner to begin with!).

It just seems from reading the threads that you need to read some introductory engineering texts on circuit theory (followed by antenna theory) if you really want to get your mind wrapped around these effects. I ran into this same issue before I educated myself on this stuff (although I'm still no expert by any means). From reading ham mags or books, often you see rules of thumb and general statements but not much theoretical development, and I think that can lead to a lot of confusion about what is really happening. I'd also suggest purchasing an antenna analyzer, so that you can measure Z and X_C , X_L at various points in your feed system, to help understand what is going on. There's a small relatively cheap one by Autek Research which I use.

If you have a reactive (whether capacitive or inductive, ie, a $-j$ or a $+j$) component to the impedance looking towards your antenna, then you will never have a purely resistive path unless you alter the impedance at the antenna end. Putting the tuner in the circuit does not change the properties of feed-antenna system downstream. It merely allows your radio to "see" it as a purely resistive system, even though it is not.

Resonance as I understand it is when your inductive reactance is equal to your capacitive reactance at a given frequency. The upshot is the input impedance to such a circuit is purely resistive. There may be other definitions, but this is the one I'm aware of.

>From your rig's perspective, then, the antenna-feed-tuner system appears to be resonant. If you were to take an antenna analyzer to the feedline of the system as seen by the output of the tuner at that same frequency of interest, it would show some nonzero reactive component. Therefore by the above definition, it would not be a resonant system.

Similarly, at the antenna terminals, you would see some nonzero reactive component.

You can either put in an impedance ("conjugate") transformation at the antenna terminals or at the output of your rig to make the entire system appear resonant at the rig's output. Most people prefer to have a purely resistive near-to-50 ohm feedpoint at the antenna end for a variety of reasons, which I don't quite feel confident enough right now to attempt to thoroughly explain! I believe one reason is to prevent RF from radiating

off the feedline.

I believe, but am not able to prove at the moment, that the "ideal" antenna/feed system is one in which the antenna feedpoint is pure resistive without need of any type of match, and of course the feedline and output impedance of the rig is also pure resistance (and all three are the SAME resistance!). This way, maximum efficiency is achieved in the system. Otherwise, you will not obtain the maximal/optimal ERP.

Hope this helps, I'm sure others will chime in.

72, Bert WF7I

MSN Photos is the easiest way to share and print your photos:
<http://photos.msn.com/support/worldwide.aspx>

Date: Sat, 20 Jul 2002 08:54:13 -0800
From: Jim Larsen - AL7FS <AL7FS@arrl.net>
To: nally@talstar.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [130253] Source for "The Electronic Data Book for Homebrewers and QRPers" by NA5N
Message-ID: <3D3995B5.B7FA2411@ARRL.NET>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

>From my article: <http://www.qsl.net/al7fs/AL7FS3.html>

Go to the source:

Paul Harden, NA5N
Quicksilver Printing
PO Box 757
Socorro NM 87801
na5n@zianet.com

I don't know if this is still current but Paul should chime in any time now.

73, Jim

--

Jim Larsen, AL7FS, Anchorage, Alaska
(BP51cc) - 61.101 North, 149.824 West

ex-WA0LPK AK-QRP#003 SOC#003 10-X-#12094
mailto:al7fs@arrl.net - <http://www.qsl.net/al7fs/>

Date: Sat, 20 Jul 2002 12:03:44 -0500
From: <mgoins@usa.net>
To: <qrp-1@lehigh.edu>
Subject: [130254] WTB SW-30+
Message-ID: <20020720170344.18793.qmail@uwdvg020.cms.usa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable

Among the hundred-and-one other things going on here at the moment, is a search for a SW-30 + to us bicycle mobile. Anyone have one that they'd part with? =

Thanks.

mike
wb5yjx

Date: Sat, 20 Jul 2002 11:08:52 -0600
From: William R Colbert <w5xe@juno.com>
To: qrp-1@lehigh.edu
Subject: [130255] Re: Offence under US code ...
Message-ID: <20020720.110855.-365889.27.w5xe@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

An encouraging item in the local paper this morning about the email scammers from Africa. A bunch of them were arrested in various African locations and Canada in May and June. So this latest flurry of spams is likely their effort to get funds for bail.

Back to radio.

Ray

"The more you read about politics, you got to admit
that each party is worse than the other.
The one that's out always looks the best." -Will Rogers
Ray Colbert, W5XE, 00TC#3618, SOWP#1064M
NARTE-NCT2R QRP-ARCI 5784, El Paso, (FAR WEST) TEXAS

Date: Sat, 20 Jul 2002 11:20:27 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: Nv4t@aol.com
Cc: qrp-1@lehigh.edu
Subject: [130256] Re: Clear the air
Message-ID: <Pine.LNX.4.44.0207201119310.3014-1000000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

It's a problem Bill. I like to know why it works.

On Sat, 20 Jul 2002 Nv4t@aol.com wrote:

> Here's my theory: If it works , don't question why, just " don't worry be
> happy"!!!!
>
> Works for me- If I can work 'em, that's all that matters!
>
>
> Bill NV4T 72,
>

--
Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

Date: Sat, 20 Jul 2002 12:25:38 -0400
From: Steven Weber <kd1jv@moose.ncia.net>
To: k4ahk@ix.netcom.com
Cc: qrp-1@lehigh.edu
Subject: [130257] Re: Norcal Paddles - 2nd Request
Message-ID: <3.0.6.32.20020720122538.007a7570@mailhost.ncia.net>
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

>
>How wide is the base of the Norcal paddles. Is the current production
>paddle the same width?
>
Bill,

I don't have mine handy (it's up at the summer cabin) but I believe the base is about 3" square. The current production paddle is made by Vibroplex and is called the "code warrior" and I believe sells for \$99.95.

There were two versions of the Norcal paddle made, one with "wide" paddle spacing (about 2") and one with "narrow" paddle spacing (about 1") The Vibroplex version uses the narrow paddle spacing.

Occasionally, someone will put their original Norcal paddle up for sale, but it's rare and sells instantly. I know I won't sell mine, even though it is getting a little beat up and could use a new paint job, hi.

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
<http://www.qsl.net/kd1jv/>

Date: Sat, 20 Jul 2002 15:02:33 -0400
From: "Pastor-KC1DI" <elbc@pivot.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [130258] FT: MfJ 901B
Message-ID: <000b01c23020\$0211c180\$bfa6ba42@dor>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi All,
Have a MFJ 901B antenna tuner which I would like to trade for almost any QRP rig. have no rig at the moment and find myself off the air.. that's not good , HI!!! If you have something that might put me back on the air Cheap let me know..
73 Dave KC1DI

Outgoing mail is certified Virus Free.

Checked by AVG anti-virus system (<http://www.grisoft.com>).
Version: 6.0.377 / Virus Database: 211 - Release Date: 7/15/02

Date: Sat, 20 Jul 2002 13:06:01 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: qRP-L@lehigh.edu
Subject: [130259] CQC Gold Rush tomorrow
Message-ID: <3D396039.25713.913804@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-description: Mail message body

Hi, Guys--\

The CQC's "Great Colorado Gold Rush" is tomorrow, from 2000-2200Z 20M CW.

Full details at <http://www.cqc.org/contests/gold2002.htm>

The Gold Rush is a two hour QRP sprint that has a couple of interesting twists to make it fun--

1. Classes are based on ANTENNA TYPE, e.g. Vertical, Wire, or Beam, and you are competing only with others who are using the same sort of antenna.
2. The same station can be worked up to three times, so long as 30 minutes have elapsed between contacts. You get 3 points for the first contact with a station, 2 for the second, and 1 for the third.

The exchange is RST, SPC, Antenna-Class, CQC Number or power.

It's a lot of fun, no pressure, and everyone is welcome! See you there...

73
Marshall Emm
N1FN/VK5FN
n1fn@MorseX.com
Morse Express and Oak Hills Research
"Everything for the Morse Enthusiast"
<http://www.MorseX.com>
<http://www.ohr.com>
(303)752-3382
--

Date: Sat, 20 Jul 2002 15:05:08 -0600
From: "James R. Duffey" <jamesd1@flash.net>
To: qrp-l <qrp-l@lehigh.edu>
Subject: [130260] 24 hr, UTC, WWVB Clock at Wal-Mart for \$12.56
Message-ID: <B95F2CA4.196B5%jamesd1@flash.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

I never thought that I would be a shill for that which epitomizes much of what wrong with US retailing today, but here goes.

I purchased an Oregon Scientific model RM-103A clock at Wal-Mart today for \$12.56.. It sets itself to WWVB 6 times a day, has provisions for 24 hour readout, can be set to UTC, has seconds readout, and comes with a battery! The digits are large enough to read at a any distance by either a myope or presbyope. In short it has everything I want in a clock and is cheap. Now if it only had a Firewire, USB, or ethernet interface!

It also shows the date which is nice as the most common error in DX QSLing is reporting local date rather than UTC date. It also shows the year, but I am usually not that out of touch with reality.

It indicates that WWVB has a strong signal here and set itself (to Pacific time) after several minutes. Neat!

The seconds display is nice for satellite work.

It says it sets itself to Daylight Savings Time, so I suppose I will have to set it back to UTC twice a year. I am going to tape the instructions on the back so I remember how to do it.

At the Wal-Mart I went to, they were located in a special display. They also had an orthogonal (black instead of silver, vertical instead of horizontal) model available with the same features at the same price. -Dr. Megacycle
KK6MC/5

--
James R. Duffey KK6MC/5
Cedar Crest, NM DM65

Date: Sat, 20 Jul 2002 15:56:53 -0600 (MDT)

From: "Karl F. Larsen" <k5di@zianet.com>
To: qrp-1@lehigh.edu
Subject: [130261] The Answer
Message-ID: <Pine.LNX.4.44.0207201556010.3665-100000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Walter Maxwell took 68 pages to say what I will say here in one page. Consider a transmitter feeding a tuner that has a feed line hooked to it that hooks to the center of an antenna.

The transmitter puts out 10 watts that is carried to the antenna feed point (assume no loss in the feed line) and we will say the feed-point is not equal to the feed line impedance. The antenna will absorb some of the 10 watts and reflect the rest, say 3 watts.

The basic rule of Physics called conservation of energy assures us that a real 3 watts of power is reflected. This is because 10 watts arrived and 7 watts were absorbed in the radiation resistance of the antenna and 3 watts are left to be accounted for. It is reflected.

The 3 watts travels back down the feed line to the tuner where it's reflected back up the feed line again in phase with the 10 watts from the transmitter. Conservation of energy says the 3 watts must add to the 10 watts making 13 watts on the feed line.

All of this forms a standing wave on the feed line that reaches equilibrium when 10 watts is absorbed by the antenna. So the entire 10 watts in this no loss example reaches the antenna over the long term. If the feed line has loss then less than 10 watts will reach the antenna. This loss can be calculated but it's complicated.

Back to the tuner. Why does the reflected power reflect at the output of the tuner? Because again conservation of energy says there is nothing in the tuner that can absorb power except the resistance in series with the inductance which if the Q is high is a very low resistance, and so 13 watts MUST LEAVE the tuner. This power is REAL and a watt-meter could measure it.

In summary, conservation of energy explains everything. This may not be real clear without pictures. But I know exactly what the pictures will look like. Junctions with power in and power out. Now I KNOW why my antenna works so well and how to design another. I will use low loss feed line because any loss has an exaggerated effect due to reflected power. I think 450 ohm ribbon is good enough and the new Radio Shack foam filled 300 ohm ribbon is not as good but good enough.

--

Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

Date: Sat, 20 Jul 2002 16:03:24 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: "James R. Duffey" <jamesd1@flash.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [130262] Re: 24 hr, UTC, WWVB Clock at Wal-Mart for \$12.56
Message-ID: <Pine.LNX.4.44.0207201602350.3665-100000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I will run to Wall Mart in Las Cruces and see if they have any tomorrow.

On Sat, 20 Jul 2002, James R. Duffey wrote:

> I never thought that I would be a shill for that which epitomizes much of
> what wrong with US retailing today, but here goes.
>
> I purchased an Oregon Scientific model RM-103A clock at Wal-Mart today for
> \$12.56.. It sets itself to WWVB 6 times a day, has provisions for 24 hour
> readout, can be set to UTC, has seconds readout, and comes with a battery!
> The digits are large enough to read at a any distance by either a myope or
> presbyope. In short it has everything I want in a clock and is cheap. Now
> if it only had a Firewire, USB, or ethernet interface!
>
> It also shows the date which is nice as the most common error in DX QSLing
> is reporting local date rather than UTC date. It also shows the year, but I
> am usually not that out of touch with reality.
>
> It indicates that WWVB has a strong signal here and set itself (to Pacific
> time) after several minutes. Neat!
>
> The seconds display is nice for satellite work.
>
> It says it sets itself to Daylight Savings Time, so I suppose I will have to
> set it back to UTC twice a year. I am going to tape the instructions on the
> back so I remember how to do it.
>

> At the Wal-Mart I went to, they were located in a special display. They also
> had an orthogonal (black instead of silver, vertical instead of horizontal)
> model available with the same features at the same price. -Dr. Megacycle
> KK6MC/5
>

--

Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

Date: Sat, 20 Jul 2002 15:01:22 -0700
From: "Ian Wilson" <ianmwilson@earthlink.net>
To: <wf7i@hotmail.com>,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [130263] Re: Cadence student version PSPICE
Message-ID: <001701c23038\$fc7c46a0\$0b02a8c0@trabucoserver>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> I figured someone on this list would know the answer.
>
> I just downloaded the huge 27 MB student version of Cadence PSPICE from
the
> Cadence website. I've been using a freeware "Winspice" program up till
now.
> I am in general a novice spice user. Winspice seems to accomodate the
> traditional syntax of spice statements (which I am used to from my college
> courses in the early 1990s) in the .CIR files. However, I cannot read
those
> files into the Cadence program.

PSPICE syntax is a superset of SPICE2 syntax. They are pretty compatible if
you
just use vanilla constructs. If you have a netlist, you can do a File Open
on it somewhere
(sorry to be vague I don't have the program running here).

>
> Not having spent any time pouring over the "help" files yet, can someone
> tell me if the two are not compatible? Does Cadence SPICE use a totally
> different syntax from the older spice statements?
>

If you get part way there, I can probably help you with specific error messages or whatever.

Hope this helps,

--ian k3imw/6

Date: Sat, 20 Jul 2002 18:12:16 EDT
From: ARDUJENSKI@aol.com
To: qrp-l@lehigh.edu
Subject: [130264] Searching QRP-L
Message-ID: <103.1890c94c.2a6b3a40@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Not sure how many are aware of this search engine for QRP-L ARCHIVES

<http://qrp.kd4ab.org/cgi-bin/s.cgi>

Alan KB7MBI in Woodinville, WA
FISTS 5702 Proud member of ARRL

End of QRP-L Digest 2622

